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Communications.

INSTRUMENTAL DIAGNOSIS.

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(Continued from page 296.)

VI. Ophthalmoscopic Characters of Diseases of the Crystalline Lens.

1. Cataract.

It will be advisable to premise some facts concerning the anatomical structure of the crystalline lens, before entering upon the subject of the diagnosis of the various species of cataract, that the reader may have a clearer and more ready conception of their position and constitution.

The crystalline belongs to the class of convex lenses. Its anterior face describes the curve of an ellipse, and the posterior, that of a parabola joined at their extremities, and giving a diametric measurement, in the adult, of from one-third to three-eights of an inch, and an antero-posterior axis of from one-eighth to one sixteenth of an inch. It weighs about four grains, and is situated in a fossa upon the anterior surface of the vitreous humor, being held in its position behind the pupil by the hyaloid membrane which attaches itself closely to the posterior capsule, and by the zonula which is in connection with the capsule of the circumferential portion of its anterior surface, and is thus brought into close relation with the ciliary processes, the aqueous and vitreous humors, through which its nutrition is carried on.

The lens consists of two portions, a central one of fibrous structure, enveloped by a thin elastic homogeneous external membrane, called the capsule. The former has its fibrous arranged in a very peculiar manner so that under certain circumstances the lens break into sections by star-like dissepiments, which, in young subjects are tri-radiate, and in more advanced age have from eight to sixteen radii. The fibres are hexagonal in cross section, and are developed from nucleated cells which may be seen in various stages of maturity just beneath the anterior capsule and the attachment of the zonula. In the centre of this face of the capsule they present themselves as a single layer of beautiful round nucleated polygonal cells further outward they become round, array themselves as in lines in the position of the future fibres. It will thus be seen that the growth of the lens is exogenous, that is, the older fibres are central and the latest formations at the surface, an arrangement which has given rise to the distinction of the lens substances into nucleus and cortical layers; there is, however, no other boundary line between them than that established by the difference in density. Wedged in between the fibrous and their terminations in the star there is to be found a thick, clear hœmogenous substance having the general properties of protein matters.

The constituents and mode of nutrition of the lens being known we are prepared now to look into its morbid changes, which are nutritive derangements manifested either by atrophy or inflammatory action, producing opacity of the lens (cataract), alteration in its consistence (presbyopia), or change of form (myopia, and hypermetropia).

The opacity originating cataract is sometimes the result of pure atrophy, sometimes of inflammatory action, and at others both of these conditions are associated in inducing the result. The immediate cause of the change in diaphanecity may be either located in the lens itself or in these parts intimately connected with its nutrition. The alterations

occur principally in the lens-cells, and fibres, starting at one time in the superficial strata and extending inwards, at another time reversing this order, there being no disposition to limitation when the disease has once begun.

The changes in the cells and fibres are various; the former often multiply and their contents become granular and opake, or the cell walls are broken down, retrogradative changes occur, fatty or choloid particles result, and the whole mass forms a fine, molecular brownish-yellow detritus beneath the anterior capsule. In other cases, particularly those of an inflammatory character, the cell-alteration involves the production of purulent matter instead of the detritus above mentioned, and occupying the same position constitutes that rare form of cataract designated purulent. The lens-fibres, in some instances, simply atrophy, and become less diaphanous, in others they are found swollen and opake.

According to the nature, location, extent, degree, and mode of developments of these alterations in the constituent elements of the lens, the physical appearance of cataractous lenses will vary very greatly; and as the determination of the exact seat of the cataract under treatment has an important influence upon the selection of the appropriate surgical procedure required, the establishmet of clear and distinct characteristics of each variety is absolutely demanded for the attainment of any therapeutical success. The first distinction to be made of cataract is into the *true* and *false*. True cataracts are these we have, up to the present, been speaking of, and consists of alteration in the crystalline itself. The so called false cataracts are those that are produced by various alterations in the surrounding tissues particularly of the uvea and the ciliary processes, denoted by the deposition of lymph, or pigment, or what is sometimes seen, both of them at the same time, upon its surface.

According to the position of the alteration in the lens, cataract is further divided into *capsular*, *lenticular*, and *capsulo-lenticular* varieties, terms which explain themselves. Lenticular cataracts vary in consistence, and are either hard, soft or fluid. Hard lenticular cataracts are those met with in advanced age, the morbid alteration begins at the centre of the lens, hence they are sometimes distinguished as nuclear cataracts, and proceed toward the superficial layers which are in time also rendered opake. The changes consist in a greater condensation of the pre-existing lens elements which become more granular and are associated with fatty particles. At a more advanced period there is a further breakning up of the above mentioned elements resulting in the formation of a detritus made up principally of fat, calcareous and myeloid substances, and an organic base. A larger part of the fatty particles are usually metamorphosed into cholesterine, presenting itself in nests of beautiful crystals. The calcareous substance is usually under the form of carbonate of lime, more rarely the phosphate, and is seen aggregated into small particles, evident both to the eye and touch. This material is sometimes in such quantity as to have given the impression of an ossification of the lens substance.

Hard cataract diminishes the volume of the lens, as see in the enlargement of the posterior chamber, and the free movements of the iris, conditions exactly the reverse of soft cataract. The color of the opacity is grayish-yellow, or dirty brownish gray; sometimes reddish-brown or green, rarely dark-brown or blackish.

The distance between the lens and the papillary margin enables us to see with strong illumination the shadow cast by the iris upon the surface of the lens under the form of a dark crescent. The ophthalmoscope reveals when the iris is fully lit up, the red color of the fundus can be faintly seen through the nuclear opacity, but none of its details can be deciphered. If the light used be less bright the opacity is perceived as a cloud or dark spot in the field.

It is by oblique illumination, however, that the true color, extent, position, and boundaries of cataract can be determined. As soon as the convergent rays fall upon the anterior surface of the lens a grayish-blue reflection is perceived, but when they have penetrated to its posterior surface the peculiar amber-tinted nucleus is

discernable, the borders of which are not clearly defined and are at last lost through imperceptible gradation of shading in the circumferential zone of the lens, which still remain transparent, or at least translucent. This finally yields to diffused opacity, in the midst of which may be either seen defined and cloudy radiated striata extending from the nucleus in the direction of the lens-fibres, or specks of cloudy lens substance. When the striæ are broad, bluish, and not entirely opake, with transparent lens substance speckled with gray spots between them, they indicate a softened condition of the cortical layers, a process that may advance until these layers become fluid, permitting the nucleus to sink to a new position where its yellow color may be seen shining through the capsule.

The calcareous deposits above spoken of are seen as bright, opake, chalk-like spots, scattered here and there, or collected together in lines, so as to give a mottled appearance to the surface of the crystalline lens; cholesterine is marked by the peculiar brilliant and shining appearance of its crystals.

In contrast with nuclear cataract, which occurs most frequently after sixty years of age, should be placed those senile changes in the lens which may be mistaken for it. They consist in the deposit of a hyaline substance between the anterior capsule and the lens substance, the latter becoming dry, friable and easily split, while its nucleus acquires a wine or amber-yellow, or even brown color. The nucleus may be easily defined within the cortical layers, which still remain transparent, or what is more common, are most frequently marked by a radiated cloudiness in lines following the course of the lens fibres. This alteration in the lens in old persons confer upon its surfaces greater reflecting power, which causes the normal black color of the pupil to disappear, and its place to be taken by a smoky or grayish reflection, quite suggestive of cataract.

A cloudy appearance of the pupil is also produced by reflection from the fundus upon which there is a slight retinal detachment, and is to be distinguished from cataract by the absence of all crystalline opacity and the presence of the opthalmoscopic characters of retinal separation.

Soft lenticular cataract is more frequent in early manhood and youth. The alteration upon which it depends begins in the cortical layer of the lens under the form of several whitish or grayish opake points, or lines variously arranged, or, instead of these, there is one uniform opacity. The change consists principally in the cells and lens fibres becoming granular, and at the same time there is produced between them molecular granules, minute limpid drops and oil globules; the fibres also undergo a ribbon-like flattening. There is, besides, a formation in the superficial layer of solid corpuscles, rounded or of various forms, homogeneous or granular, imbedded or not in a substance of a waxy, homogeneous consistence

We have previously stated that secondary changes occur in the lens, involving the production of calcareous and cholesterine particles, and we must repeat that the result occurs especially in the softened lens substance, which is thus converted into a heterogeneous condition, that light, instead of passing through these tissues, is reflected by them, and assumes a whitish or grayish tint.

Soft cataract is distinguished into several species, according to the arrangement of the lines and nebulosities in the lens. In one sort the lines have a radiate direction from the centre to the circumference, sometimes extending across the lens, splitting it in sections; sometimes they fall short, either toward the centre or the periphery. Their position is either upon the anterior or posterior surface of the crystalline, a fact that can be determined by the ophthalmoscope in the difference of their curvature, in the former instance being convex, and in the latter concave.

In the further progress of the disease the intervals between the lines becomes cloudy, and the whole surface assumes a uniform, opaque, bluish-white, milky, and sometimes grayish color. The total volume of the lens is increased, obliterating the posterior chamber, and preventing, therefore, any shadow being thrown upon the anterior capsule by the

margin of the iris, which is also pushed forward, and has its motions impaired.

The rate of development of this form of cataract is much more rapid than the nuclear form, usually not beyond two years; in the traumatic form, however, this change has been observed to be accomplished in a few minutes; while, on the other hand, adults have been known to have a progressing, soft cataract for thirteen or fourteen years. Congenital cataract belongs to the soft variety.

The ophthalmoscope shows all these various forms of lenticular opacity with great distinctness. The opaque lines and dots can be seen as dark shadows by strong direct illumination upon the red fundus; while, with oblique illumination, they shine out in their true bluish-gray color. The position occupied by them may be determined by directing the patient to bend his head strongly backward, when, if they be near the posterior surface of the lens, they will disappear behind the lower margin of the pupil, while the anterior transparent surface only will be brought into view. If there be a single streak of opaque substance near the posterior capsule, it will disappear in the same direction, if the eye be directed upward. On the other hand, if the streak be in or near the anterior capsule, it will, in this movement of the eye, pass in an upward direction.

In that variety of cataract consecutive to glaucoma, there will be added to the ophthalmoscopic characters above detailed, those denotive of the latter disease.

Liquid lenticular cataract is nothing but a further advanced degree of soft cataract, the cortical layers breaking into a molecular fluid, containing in suspension fat globules and corpuscles, in which the nucleus floats, or in some cases this is even dissolved. It presents a milky aspect, and the general characteristics of soft cataract are, or have been present. The fluid contents of the capsule being of unequal density, when the eye has remained at rest for some time, they separate into strata, the heavy portion of a deep yellow color, sinking to the bottom of the capsule, and the lighter, almost colorless, floating upon the top, a well marked line defining their boundaries.

Capsicular cataract, as the name indicates, implies opacity of the capsule, but such a change in the membrane itself is one of the rarest possible occurrences; the alteration included under this designatien usually consisting either in the production of a fine pseudo-membranous, fibrous, striated layer, which probably originates from the iris, having been in communication with it, and ceases to adhere to it, while it remains fixed to the anterior part of the capsule, especially at its centre, or a quantity of microscopic granules, generally of a rounded form, composed principally of phosphate of lime, and a little carbonate of the same base, is deposited in the membrane as to interfere with the transmission of light; commonly, both of these alterations are found existing in the same case.

The calcareous deposits are occasionally heaped up at the centre of the crystalline, as to project sensibly above its surface, or even into the anterior chamber under the form of a conical chalk-white mass. Occasionally the entire substance of the lens is absorbed, bringing the anterior and posterior segments of the capsula in contact. This form of cataract is often of secondary origin.

The deposit of false membrane upon the anterior capsule always leads to alteration and opacity in the subjacent and corresponding portion of the lenticular substance proper.

With the ophthalmoscope the pseudo membranous or calcareous formations can be discerned as dark spots upon the fundus, while by oblique illumination they stand out as white objects with smooth or uneven surfaces, according to the nature of the deposit. This last circumstance is of diagnostic importance, inasmuch as we can determine simply by examining the character of the surface, whether the cataract is posterior, capsular or polar, the former depending upon alteration in the lens substance near the capsule, and presenting a rough and often granular surface, while polar cataract is usually of inflammatory origin, the opacity being outside of the capsule with a smooth shining anterior surface.

Capsulo-lenticular cataract consists in con-

joint opacity of both lens, substance and capsule. It may be hard, soft or fluid, of limited extent, or complete. It will present the distinctive characters of the two former varieties combined both as regards their objective and ophthalmoscopic characteristics.

False cataract is produced by the deposit upon the anterior capsule or in the pupil, of fibranous bands, pus, blood, or the uvean pigment. It is produced by inflammatory disease of the adjacent structures or by injury, and almost always is complicated by adherence of the pupillary margin to the capsule. In many cases, true cataract will follow in the train of morbid complications.

By means of oblique illumination the finest details of the surfaces of all these new products may be accurately studied, and their nature truthfully determined. The ophthalmoscope reveals them simply as dark spots upon the illuminated fundus, supposing of course, a sufficiency of clear lens to permit the rays of light to reach the fundus.

Before the introduction of the ophthalmoscope, other means of diagnosis were had recourse to. We have already described the plan of M. SERRE by the phosphanes for distinguishing cataract from amaurosis, and indeed in every case before a cataractous patient is brought to an operation, the extent of the sensibility of the retina should be determined. In order to do this the person should be placed in a dark room with a lighted candle, the flame of which is protected by a colored glass, to intercept the heat rays, that those may not be confounded with the luminous rays. Then the patient should be directed to indicate the direction of the light, and he should be tested as to his ability to distinguish whether the light may or may not be dimmed by any object interposed between him and it Of course any operation undertaken in a case complicated with amaurosis would be futile.

There are two other diagnostic tests of cataract which we shall briefly notice; the eutoptic and catoptric. The eutoptic test much praised by LISTING, consists in directing the patient to view the clear sky through a hole made in a card with the finest needle, by which means he will be enabled himself to see any opaque spots or lines that may be present in the lens interfering with the passage of the light to the fundus.

The catroptric test is based upon the well-known fact, that when a candle is held before the eye, three images of it are seen in the pupil, two upright, formed by the cornea and anterior surface of the crystalline lens, and one inverted, formed by the posterior surface of the lens, and situated between the other two. It is evident that any opacity impairing these surfaces as mirrors will be denoted by alteration in or destruction of these images.

[To be continued.]

EDITORIAL DEPARTMENT.

Periscope.

Guyon's "Cephalotripsie Intracranienne."

M. GUYON claims (*Wiener Med. Presse*, No. 20, 1868) that by making an additional perforation at the sella turcica, we secure greater compressibility of the head.

He uses the following instruments:

1. A guiding-staff thirty centimetres long, seven millimetres in diameter, the lower end shaped like a screw-driver, the upper provided with a removable handle.

2. Two trephines, which differ only in the size of their crown. One crown is three, the other four centimetres in diameter. Each trephine consists of a crown with simple saw-teeth, a hollow axis, which permits it to be pushed over the guiding staff, and a transverse handle. To guard against going too deep, the crown is provided, with a short sheath.

3. A slender steel cephalotribe, which is only to be compressed with the hand; the handle of the right blade is provided with a movable serrated plate (CREMELLAIRE), which fastens to a tooth on the handle of the left blade, and holds the handles together when they are compressed.

The operation is as follows:

Pass the guiding-staff up under guidance of the fingers of left hand, and bore into the presenting cranium; then remove the handle, and push the larger trephine over the staff through the opening in the skull. This is easily accomplished; and we then withdraw both instruments. The operator now introduces his left hand, and with its index finger enters the opening in the fœtal cranium, and seeks the sella turcica; when found,

the guiding-staff is led to it, and bored in as before. The smaller trephine is now pushed over the staff, and bored as deep as the protecting sheath will permit. The cephalotribe is then used in the customary manner. Of course, this operation can only be performed in head presentations. It has the recommendation of Professor Späth, of Vienna.

On Syringing the Ear.

Dr. Roosa, of New York, has the following remarks in *the Medical Record* on this simple yet important operation:

"There is a proper and an improper way of syringing the ear, simple procedure as it is. If we use one of the miserable little glass syringes, so commonly sold for injecting the meatus, without taking hold of the auricle at the same time, in order to straighten the auditory canal, the upper wall of which, in a normal condition, falls down toward the lower or anterior wall, very little of the fluid will enter the ear.

If, again, the vessel in which the water is to be returned from the ear be not properly held, the fluid will run over the patient's neck, and cause very unpleasant sensations.

In order to syringe the ear properly, a hard rubber syringe should be used, and a thin bowl be held close under the lobe of the ear well up into the fossa at the articulation of the lower jaw with the temporal bone. The patient himself, if he be a large child, or an adult, will hold the bowl better than an assistant. The surgeon then straightens the meatus by gently pulling the auricle in an upward direction with one hand, while with the other he uses the syringe. It is well to allow the water to first pass into the concha of the auricle, and not immediately into the canal, in order that the patient may judge as to the temperature of the water, which should be lukewarm. The ear will not usually tolerate a cold fluid.

Performed with a good syringe, and with such precautions as have been named, syringing the ear becomes very pleasant to the person who is subjected to it. Children who have already been to a physician who has manipulated in the auditory canal with a forceps or other instrument, will, of course, object to the syringing, from fear of pain; but if no such attempts have been made, the youngest child can soon be coaxed out of any unwillingness to submit to the operation. I was once, however, compelled to etherize a child, in order to remove a pea by syringing, which had been previously hunted for with instruments.

It is theoretically reasonable that the injection of water is a potent agent in removing a foreign body from the ear. It is sufficient to remove a plug of wax, which has been impacted for years, and which has completely plugged up the auditory canal. How much more potent must be the stream of water, when there is sufficient space through which it may get behind the foreign body and wash it forward by the returning current! Experience also confirms what theory thus indicates. There are no cases on record, I think, where syringing, when undertaken before any other attempts have been made, failed to remove a foreign body from the ear.

Unfortunately however, those who believe in the efficacy of the simple procedure of syringing do not always see these cases at first. The foreign bodies are often impacted, or so situated that a stream of water cannot pass behind them. There is often also very great inflammation of the parts, caused, not by the foreign body, but by the attempts to remove it. If it be plain that the foreign body is not causing the severe symptoms, a little delay may be advised, until proper local treatment—the use of leeches, and the instillation of warm water—has subdued the inflammatory process. If it be probable that the foreign body is wedged in upon the drum, or perhaps pushed through it into the cavity of the tympanum, there is nothing to be done, but to remove it at all hazards. Perhaps the best way, in case all attempts by means of delicate instruments introduced into the canal (which is at the same time well illuminated by a concave mirror placed on the forehead by means of a band) have failed to reach the body, will be to adopt Tröltsch's suggestion and detach the auricle posteriorly, and thus reach the body from behind. Having thus separated the auricle from its attachment, the membrana tympani will be thoroughly exposed, when it will be very easy to remove anything which may be upon it. Of course all other reasonable and safe means should be employed before resorting to this operation, although it cannot be considered a dangerous method, which can hardly be said of the forcible attempts made through the auditory canal.

Years ago a case was recorded in the *Lancet*, and copied in Pilcher's work on the Ear, where a bit of nail was hunted for in the ear of a child for a long time; pieces of bone were removed, but no nail. The patient finally died from meningitis induced by the attempts to remove something which the post-mortem examination showed was not there. I have heard of a similar case as occurring in this country.

I once had a case which gave me a great deal of uneasiness. A child was brought to me who had placed a button in the ear. The button, although lying very near the drum, was plainly to be seen. Several attempts had been previously made to remove it with the forceps, but they had only pushed the button farther in, and caused great pain. Faithful syringing had no effect. I then caused the child to be etherized, and, under a good illumination of the parts, attempted the removal with delicate instruments. These atttempts also failed. Poultices were then placed over the meatus, and the button was brought to the orifice of the meatus by suppuration, when I removed it a number of weeks after. With my present experience, if such a case were to present itself, I should not use the forceps at all, but after the syringing had failed wait, until some disturbing symptoms arose.

We may sometimes place the head of the patient in such a position while syringing as to favor the exit of the foreign body better than by the ordinary upright position. Voltolini once removed a foreign body from the meatus by syringing the ear while the head was hanging over a chair.

The impossibility of securing binocular vision while operating in the ear, unless we are at a great distance from it, when it is very indistinct, which renders one unable to estimate depth, is one of the principal reasons for the failure of attempts with instruments to reach the offending substance."

Death from Carbolic Acid.

A London journal says that an inquiry was held on June 23d, by Mr. Richards, Deputy Coroner, at Sion House, Lower Clapton, relative to the death, from the inhalation of poison, of Mr. Capel Henry Berger, aged 28 years.

Mr. C. Berrow Berger, Sion House, said that deceased lived with him, and was a color manufacturer. He suffered for a fortnight past from a very severe toothache, but a dentist advised him to preserve the tooth and bear the pain. He was an accomplished chemist, and he tried all sorts of things to allay his sufferings. On Sunday, June 21, while at church, he had to sit in a great draught, and that brought on a relapse of the pain. In the afternoon he went to his room, according to his custom, and bolted himself in, for the purpose of spending some time in devotion. When his sister called him down to tea, she could not make him hear, and ultimately witness broke open the door, and found him lying dead on the floor, upon some flexible tubing which communicated with a bottle of carbolic acid. His face was quite black, and he had vomited. It was clear that he had died from the carbolic acid, but he had not committed suicide.

Dr. J B. Metcalf said that deceased had fixed an elastic tube, ten feet long, to a large glass jar of carbolic acid, and had then evidently seated himself in a chair, and had inserted the end of the tube in his mouth, for the purpose of allowing a drop of the liquid to fall on the tooth. He had a brass regulator on the tube to control the quantity of the acid, but it did not act efficiently, and the volatile poison overcame him, and he became giddy, and fell. Being alone in the room, the poison continued flowing into his mouth, and the heart's action was stopped, and he died. The remedy which he tried was a new one, and the deceased was in the habit of recommending it to his friends. It should never be used without medical assistance.

A New Uterine Syringe.

Dr. Herman Beigel, of the Metropolitan Free Hospital, London, (*Berliner Klin. Wochensch.*, No. 25, 1868), has constructed an instrument which he claims is free from the objections urged against most other syringes.

He takes a glass jar, of from two to three quarts capacity. Its neck is provided with a metallic ring, into which a high brass stopper fits, and is tightened by a few screw threads. On one side the stopper receives a tube, having near its distal end a hand-ball and an air-chamber, and at the other terminating in a small, plain opening on the under surface of the stopper. On the other side, the stopper is connected with a flexible tube, which can be cut off, by a stop-cock, from communication with a tube leading to the bottom of the jar. The free end of the tube is of vulcanite, and so shaped as easily to receive various sized or shaped nozzles. Pressure on the distal ball forces the liquid through the nozzle, and the near ball, acting as an air-chamber, keeps up a continuous stream.

Before using, close the stop-cock, and press the distal ball a few times; on opening the stop-cock, a stream commences to flow, and pressure is only required now and then, to keep it up.

The Doctor has used small instruments of like construction in making injections for microscopical purposes. He also uses the large syringe, with nozzles of various sizes and shapes, for the eye, nose, rectum, to cleanse wounds, and, indeed, wherever a good continuous stream is of advantage.

Turpentine as an Antidote to Phosphorus.

The *Archives Gén. de Medécine* calls attention to the custom of the workmen in a match factory at Stafford, who apply phosphorus to the matches, of carrying on their breast a tin cup containing essence of turpentine. This precaution is said to be sufficient to prevent any ill effects from the action of the phosphorus. It was previously known that the vapor of turpentine prevents the ignition, and even the phosphorescence of phosphorus; but the practical application of this knowledge is not so generally adopted as it should be.

Consanguineous Marriages.

M. Voisin states as the result of a careful examination of 1077 of his patients at the Bicêtre and Salpétrière, that in no one instance of his idiotic, epileptic, or insane patients, could healthy consanguinity be legitimately regarded as the cause of the affection. He believes that the ill results which have been observed after consanguineous unions are not really due to these, but are to be attributed to the ordinary hereditary causes.—*Union Méd.*, October 3d.

Phosphate of Soda.

This salt is recommended by Stephenson (*Edinb. Med. Jour.—Med. Record*, No. 50, vol. 3, 1868) in the following cases, of children:

1. Indigestion in those artificially nourished.
2. Deficiency of the phosphates in nutrition.
3. Suppressed or deficient biliary secretion.
4. Diarrhœa with whitish stools.

The dose for children is four to ten grains, mingled with their food.

In the constipation of *adults* it acts well; one drachm is given in the morning, dissolved in water. Pain and tension in the epigastrium after meals are benefitted by doses of twenty to forty grains.

A New Test in Albuminuria.

M. Hæbler. (*Inaug. Dissert.*, Berlin, 1868) describes a new method for finding the proportion of albumen in urine.

The suspected urine, after having its specific gravity taken, is boiled together with infusion of sugar-cane in a test tube, and then treated with enough acetic acid to precipitate the albumen. The liquid is then filtered, and its specific gravity is again taken when it has reached the same temperature at which it was first taken. Multiply the difference between the two specific gravities (water=1) by 210 and we have the percentage of albumen present. In thirteen such examinations the average error was only 0.023 per cent., while in Vogel's optical test the average error is 0.046. (*Centralblatt für die Medical Wissensch., No.* 33, 1868.)

Hypodermic Medication in Goitre.

Prof. A. Lücke, of Berne, reports in the *Berliner Klin. Wochenschrift*, No. 25, 1868, a very interesting case of this disease cured by the subcutaneous injection of tinct. iodinii fort. (1 : 8). He made the injections at several spots, and at intervals of eight days. He began with four to five drops, and at last got up to two Paraz's syringes full. Until the larger quantities were used, no local or general reaction followed; and only then could iodine be detected in the urine. After four months' treatment, the patient was so far improved that only a few very hard, small knots could be felt where the tumors had been.

In the October number for 1867, of the *Archives Générales*, Dr. A. Luton de Oviens publishes the results of a similar treatment; he gives the account of eight cases which were more or less perfectly cured; in one case suppuration occurred.

Luton and Lücke mention two successful cases in which the same treatment was applied for the cure of chronic enlargement of the lymphatic glands.

Herpes Zoster.

Moers (*Deutsches Archiv für Klin. Med.*, iv. 249.) reports a case of herpes zoster bilateralis of the lower extremities, which occurred in a child fourteen months old. The vesicles did not dry up as is usual, but ran into bullæ, as in pemphigus. The child fully recovered in five weeks.

Wound of Pancreas.

B. G. Kleberg reports (*Arch. für Klin. Chirurgie* ix. 523) an incised wound of the abdomen which exposed the pancreas. The protruding portion was amputated, and the patient recovered without any remarkable consequences.

Absorption of Phosphorus.

M. Mialhe departs from his former views of the absorption of this article through the agency of alkalies, and now assumes that its solution takes place in the fats which are present in the contents of the bowel. He concludes from this, that an apparently convalescent after a poisonous dose, may suffer a relapse on taking nourishment (?). Phosphorus acts as such, and not in chemical combination; even phosphoretted hydrogen changing into phosphorus and water in the blood.

From the above, we should enjoin abstinence from fatty articles on persons poisoned by phosphorus, and when we administer it medicinally, use the oleaginous solution.—(*Union Méd.*, 1868, No. 66.)

Death from Hypodermic Injection.

Lantesson reports (*Journ. für Kinderkrankheiten*, 1868, 217—225,) that he saw a child die in a few moments with convulsions, after he had injected several drops of liquor ferri sesquichlor., for nævus maternus. Dissection revealed large coagula in the roots of the great veins at the heart, and in the right auricle and ventricle.

He supposes that a vein of some size was wounded, and that the astringent thus got into the general circulation, coagulated the blood, and finally produced paralysis of the heart. He recommends that the flow of blood into neighboring venous plexuses should be prevented by pressure when we perform this operation.

Reviews and Book Notices.

NOTES ON BOOKS.

Dr. Heinrich von Fabrice. The Study of Abortions and Infanticide. Erlangen, 1868. F. Enke. A valuable contribution on the subjects embraced in the title.

Injuries and Diseases of the Jaws. The Jacksonian Prize Essay of the Royal College of Surgeons of England, 1867. By Christopher Heath, F. R. C. S., Assistant Surgeon to University College Hospital, and Teacher of Operative Surgery in University College. London, 1868.

The title of this work fully expresses its character. The author is one of those rising young London surgeons who are destined, in due time, to occupy the chairs now adorned by such men as Fergusson, Partridge, Erichsen, Skey, and many others of the present race of teachers and operators. Mr. Heath is already favorably known by his previous productions, his Practical Anatomy, and his Manual of Minor Surgery and Bandaging, and the present work will, we are quite sure, greatly extend his reputation on both sides of the Atlantic, as an able writer.

Mr. Heath's volume comprises upward of four hundred octavo pages, and is illustrated by numerous wood engravings, executed in the best style of the art. In its composition every available source of information has been employed, and the result is a work highly creditable alike to the author's industry and talents, and to British medical literature. The volume may be profitably consulted, not only by surgeons and practitioners in general, but especially by dentists, whose particular business it is to superintend the management of the various maladies and injuries of the jaws, gums, and teeth. The excellent illustrations add greatly to the value and interest of the work. The style is very lucid, and many of the topics are treated in an exhaustive manner; indeed, far more absolutely than in any other production now before the profession. Quite a number of subjects are discussed, on which no information can be obtained, so far as we know, elsewhere.

We regret that want of space prevents us from giving a brief analysis of this excellent work, so much needed at the present day, and in all respects so admirably executed. Of the scope of the volume, a clear idea may be formed by the table of contents, which is here annexed for the benefit of the reader: Chapter I. Fracture of the Lower Jaw. II. Complications of Fracture of the Lower Jaw. III. Treatment of Fractured Lower Jaw. IV. Fracture of the Upper Jaw. V. Gunshot Injuries of the Jaws. VI. Dislocation of the Jaw. VII. Inflammation, Abscess, and Periostitis. VIII. Necrosis of the Jaw. IX. Repair after Necrosis. X. Hyperostosis. XI. Cystic Disease of the Antrum. XII. Dentigerous Cysts. XIII. Cysts in the Lower Jaw. XIV. Tumors connected with Teeth. XV. Diseases of the Gums. XVI. Tumors of the Hard Palate. XVII. Growths within the Antrum. XVIII. Fibrous, Fibro-Cellular, and Recurrent Fibroid Tumors of the Upper Jaw. XIX. Myeloid and Vascular Tumors of the Upper Jaw. XX. Cartilaginous and Osseous Tumors. XXI. Cancerous Tumors. XXII. Diagnosis and Treatment of Cancerous Tumors. XXIII. Fibrous, Recurrent Fibroid and Fibro-Cellular Tumors of the Lower Jaw. XXIV. Myeloid, Cartilaginous, and Osseous Tumors. XXV. Cancerous Tumors. XXVI. Diagnosis and Treatment of Tumors of the Lower Jaw. XXVII. Closure of the Jaws. XXVIII. Deformities of the Jaws. Lastly, an Appendix of Cases.

The number of illustrations, many of which are new, amounts to three hundred and forty-seven. Owing to these illustrations, it is questionable whether the work will be republished in this country. The cost of the English edition at London is, if we mistake not, only ten shillings, equivalent to two dollars and a half in gold in this country. The importation price would probably not exceed twice that sum, a small figure considering the value of the work.

Medical and Surgical Reporter.

PHILADELPHIA, NOVEMBER 28, 1868.

S. W. BUTLER, M. D., & D. G. BRINTON, M. D., *Editors.*

☞ Medical Society and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc. etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

SOME IMPROVEMENTS IN SURGICAL INSTRUMENTS.

Our friends who have been spending the vacation in Europe bring us some models and improvements of surgical instruments.

The *Porte-aiguille* for metallic sutures is an instrument we feel free to recommend highly in the operations of staphyloraphy, vesico-vaginal fistula, etc. It consists of a wooden handle, mounted with a metallic stem, through both of which courses a narrow channel, which permits the wire-thread to pass. There is a little toothed wheel set in half the thickness of the handle, and working against a rack-surface, fitted in the other half of the handle, which "grips" the wire and forces it onwards towards the point of the needle. The needle itself has a capillary orifice just within its point, through which the thread is propelled, after the tissues have been pierced in the required position for the suture. There are several sorts of needles accompanying the instrument, some curving to the right, others to the left, and fitting by a socket into the point of the stem.

The *Lithexer* is designed to wash out the bladder after the operation of lithotrity. It is an invention of M. Collin, and consists of a silver catheter, whose proximal extremity penetrates the bottom of a four ounce bottle to the distance of two inches, the junction being made perfectly air-tight. To the mouth of the bottle an india-rubber ball is attached. In employing the instrument, the bladder is first injected with water through the catheter, the ball is then compressed, and in expanding, draws some of the water into the bottle in which all fragments held in suspension by the water, deposits; the fluid, as soon as this takes place, is driven into the bladder by compressing the ball, and again withdrawn by its expansion, charged with an additional quantity of sabulous débris, to be deposited in the bottle as in the first instance. This process is renewed, as often as any fragments are withdrawn with the fluid.

Atomizer for the *Eustachian Tube* is an instrument devised by Dr. Bishop, of London, and of simple construction, consisting of a simple eustachian catheter, a small glass syringe, and the usual bulb employed with atomizers. According to the direction of Mr. Bishop "The solution contained in the syringe is gently forced, guttatim, into a cylinder, and at the point where it leaves the syringe, it is caught by a current of the air sent by a pump worked with a proper degree of force by the hand. This drives the fluid forwards in a pulverized state. This small apparatus is then attached to an ordinary eustachian catheter, previously introduced, and suspended by a suitable apparatus. To ensure complete pulverization, the end of the catheter is covered with a fine gauze wire. Some amount of dexterity is required in the successful use of this instrument, but this is soon accomplished by any one accustomed to the introduction of the catheter"

In the last lot of instruments imported by the energetic house of D. W. Kolbe, we find besides a number of fine endoscopes, a superb laryngoscope, the invention of Dr. Lewin. We have deemed it of sufficient importance to our readers to procure a cut of the apparatus which will save us the trouble of any lengthy description. The illuminative apparatus is fixed upon an iron tripod; to the lamp a brass bar is attached which supports two mirrors, one concave and oval, which receives the light from the lantern, condensed by a large biconvex lens, three inches in diameter, and reflects it into the throat of the patient, the other mirror is plain, and intended for the use of the patient who can see, as well as the surgeon, his own throat, so that

the instrument is really an auto-laryngoscope. It is well adapted for clinical instruction, as four individuals properly placed can inspect the same throat at the same time. We can, from personal experience, recommend this instrument highly.

Mr. GEMRIG is also actively engaged in importing and improving upon the latest European instruments. Among others we have inspected, is a modification of TOBOLD'S laryngoscope by Dr. WALES, which presents all the advantages of LEWIN'S.

Another useful and elegant instrument we noticed at the same establishment, was WALES' otoscope, which has been improved in various respects, and is now presented in the form seen in the figure. It consists of a concave reflecting mirror, of four inches focal length, perforated at the centre and supported in a metallic frame-work by two arching arms clasping it peripherally and secured by two milled-headed screws. The arms are joined at their opposite extremity by a broad ring, which is intended to slip over and support various sizes of tubes according to the requirements of different cases. The tubes and the sectional views of these extremities are shown in the drawing to the left of the instrument.

Just above the proximal or widened mouth of the tube there is placed a metallic clip to support lenses of any magnifying power required, provided, of course, this power is less than two inches, no greater magnification being attainable in the mechanical construction of the instrument, or required in practice.

The entire construction of the otoscope is subservient to the main objects in view, viz. to obtain a magnified field of the *membrana tympani*, illuminated by direct light. The advantages of this principle in the construction of all optical mechanisms designed for surgical purposes is too obvious for us to dwell upon, and we shall, therefore, close our remarks in respect to this otoscope by simply stating that we have used all forms of the reflecting instruments designed for the exploration of the ear, and can candidly state that this is the best one we have ever employed, both as regards its simplicity and efficiency, and its cheapness.

Our Boston friends, CODMAN and SHURTLEFF, have favored us with another modification of their model atomizer, and we must say

that it is an elegant instrument and sufficiently cheap to bring it within the reach of every practising physician in the country, and their energy in this direction, in popularizing such useful apparatus, deserves commendation. It is shown in the annexed cut.

A New Form of Lithotrite. By M. Reliquet.—This gentleman (Bull. Gen. Ther. June, 1868,) has presented to the Academie de Medicine a new form of lithotrite. It differs from the ordinary instrument in that the point of the female blade is curette-pointed, and the male blade straight and slightly enlarged at its point, which, when the instrument is closed, shuts against the concavity of the curette. The two blades are moved upon one another by a triple-armed screw at the handle, by which the stone is held between these points, and forcibly compressed, while a drill running through the male blade is brought to bear upon and to fritter it away.

The instrument may be brought to act also upon stones, or fragments of stone, impacted in the membranous and prostatic portions of the urethra without pinching the mucous membrane.

New Instruments for the Arrest of Uterine Hemorrhage. By Dr. Chassagny, of Lyons.—In a brochure presented to the Academie de Medicine by Dr. Chassagny, designated "New hemostatic means before and after labors complicated with placenta prævia," there are described two instruments for controlling hemorrhage. Dr. Chassagny proposes to anticipate the hemorrhage which always follows placenta prævia by the employment of the first of the two instruments, which acts as a sort of intra-uterine tampon. It consists of a blunt pointed catheter, eight millimetres in diameter, containing within it an India rubber bulb of the size of a large nut, but which can be enlarged by an injection, until it acquires the volume of an orange. The bulb is inserted within the neck of the uterus five centimeters and a half, which separates the placenta but slightly, but when the uterine contractions occur, it is forced between the uterine walls and placenta, effects the separation of the latter, and fills up the space so that no hemorrhage can occur.

This instrument may also be employed to induce premature labor, to dilate the uterine cavity so as to make it accessible for the removal of retained placenta, clots, parts of the ovum or of the membranes, or to facilitate the diagnosis and removal of polypus or fibrous tumors.

The second instrument is used to check hemorrhage after delivery. It consists of two India rubber bulbs connected together, and inflatable by tubes of the same material, furnished each with a stop-cock. One of the balls is destined to be placed within the uterus and the other in the vagina, their point of junction corresponding with the os incæ.

Notes and Comments.

Justice Done.

We are glad to be corrected in the statement made in the note to our article on "Druggists' Mistakes." In the case referred to, morphia *was* administered hypodermically, but without success. The neutralizing action of morphia upon the human system and conversely, is now as well ascertained as the action of any medicines, and should always be remembered in such cases. Not that it never fails; but he will be a nihilist indeed, who waits for medicine to be proved infallible before he administers it.

Hospital for the Insane in Rio de Janeiro.

Rio de Janeiro possesses one of the finest insane asylums in the world. It is situated at Boto-fogo. Treatment, however, is not yet up to the times. The means by which it was founded are a comment on one of the weaknesses of the human intellect—vanity. Titles of nobility can be purchased in Brazil, and José Clemente Pereira, at the time Minister of the interior, devoted the fees received for such to

the erection of this magnificent palace for the insane. (*Reise der Oestrr. fregatte Novara*, Wien, 1864, Dr. K. V. SCHERTZER.)

Death from Chloroform.

At the clinic of Professor BILLROTH, in Vienna, June 4th, a death from chloroform took place.

The operation was to be the ligation of a digital artery, in the case of a workman 26 years of age. After the inhalations had continued about five minutes, tremulous spasms occurred over the whole body, rendering an intermission of the medicine necessary. On resuming its use he became quiet; but Dr. B. now remarked that hæmorrhage had ceased, although no more pressure was applied to the radial and ulnar arteries.

A glance at the patient, who was in a *semiprone* position on a *chair*, discovered paleness, lividity of the lips, and feeble respiration. The pulse soon ceased, and, in spite of tracheotomy and artificial respiration, patient died in half an hour. Dr. B. was of the opinion that death resulted from strong spastic contraction of the heart, which was favored by his anæmic condition from previous loss of blood. Autopsy revealed a very anæmic brain, and a strongly contracted heart.

In concluding a lecture on the subject on the ensuing day, Prof. B. said: "Gentlemen, this is, after a practice of 15 years, the first death of the kind I have had. If I now count two narcotizations for every day, I have the not insignificant number 15,200. This per centage of mortality is so favorable, that leech bites and blisters cannot show one as good, and yet we always apply these; why then should we not make use of chloroform narcosis?"

A writer in the Vienna *Medical Presse*, No. 23, 1868, mentions a case which occurred ten years ago at the clinic of Prof. BALASSA in Pesth:

"After artificial respirations and other restoratives had been tried in vain, BALASSA, as a last resort, opened the jugular vein. It was many seconds before the first drop of blood came from the wound, but at last it began to flow, and therewith came first one, then a second, and a third inspiration; finally the heart again commenced to act, and the man was saved. The witnesses of this scene long remembered BALASSA's joyous exclamation, 'O él—he lives!'"

On regarding the well known fact that so *very* many of the deaths from anæsthesia have occurred in very slight operations, explorations, and even adjustment of apparatus for deformity, where little or no blood was lost, and in graver operative procedures before much blood had escaped, it appears to me that the loss of a certain amount of blood during narcosis conduces to the safety of the patient. And this appears more probable when we look at the happy results of venesection in the foregoing case of BALASSA. A. A. H.

Remedies for Elephantiasis Græcorum.

The juice of the Assacú tree (Hura Braziliensis), and the bite of the rattlesnake are regarded as remedies for elephantiasis Græcorum by some of the people in Brazil. (*Reise der Oestr. fregatte Novara*, Wien, 1864, Dr. KARL VON SCHERTZER.) The Assacú grows in the province Para, and when incised exudes a brownish or reddish-white juice, which is resinous, and thickens slowly, and finally hardens. The hardened mass is dark-brown, has more the appearance of gum than resin, and is quite soluble in water.

A commission of the physicians of Para long ago called attention to the beneficial effects of the Assacú in elephantiasis. Their report states that even on the first day after the use of this remedy is begun, wonderful improvement is shown; the disease appears to stand still, or, at least, to make very slight progress. The patients take the juice in the form of pills, drink an infusion of the bark, and also use this as a bath. Some patients claim to have felt formication at the seat of the disease on the day when the remedy was taken.

(The above account sounds a little too miraculous to be immediately credited by European or North American physicians, but it would no doubt be worth a little trouble to try the remedy.)

Dr. VON SCHERTZER also gives the details of a case in which a man affected with elephantiasis, allowed himself to be bitten by a rattlesnake, (cobra de cascavel,) he was then carefully watched by physicians; in 24 hours death relieved him of his earthly ills.

Pharmaceutical Preparations.

We have received some specimens of medicinal cod-liver oil, cordial elixir of calisaya bark, and ferrated elixir of bark, from HEGEMAN & Co., chemists and druggists, New York city. They are of excellent quality, and present the ingredients in a very palatable form.

Curare.

Curare comes from Para, Brazil, and is made from the juice of the strychnos toxifera. A peculiarity of curare, also met with in other organic poisons, is that it only acts toxically when it reaches the blood channel; and is

innocuous, even remedial, when introduced into the system by other avenues. Iodide of sodium is in Brazil spoken of as a certain antidote to this poison, and mingled in equal quantity, in solution, the former is said to prevent the action of the latter. (*Reise der Novara une die Erde*, Wien, 1864.)

Medico-Legal Queries.

[A correspondent sends us the following case, with appended queries. They are of general interest, and we shall be glad to hear from any reader versed in post mortem appearances.]

"An infant, age one day, supposed to have been murdered, after ten days' interment, was submitted to a post mortem. On examination, decomposition was found in an advanced stage, skin sloughing, and body generally mottled and discolored, and swollen. Two dark spots on each frontal bone, one especially, on the left, was noticed, the tissues underneath being of a deep, livid color when cut into, and differing from the surrounding skin, and cellular substance, bone, and periosteum, and brain under this spot apparently without any unusual appearances, save partial decomposition.

"Query.—Can any confidence be placed in such cadaveric spots in the tenth day of decomposition?

"2d. Would not the cranium be broken and brain disorganized by an ante mortem force causing such deep infiltration and discoloration?

"3d. Can the brain give evidence of strangulation (before death) after ten days of decomposition?

"4th. As a general rule, in a medico-legal point of view, can skin and tissue spots be relied on where the body is offensive, suggillated, mottled, and evidently disorganized ten days after death?"

—— Prof. Karl Braun, the distinguished obstetrician of Vienna, has been inaugurated as "Rector Magnificus" of the University there. At the ceremony, for the first time since the foundation of the University, a Protestant dean, Prof. Brücke, officiated. Prof. Braun was born in 1823, and appointed Professor of Midwifery in 1856.

[☞ *Readers of the* Reporter *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received, and acknowledged under "Communications received."*]

Correspondence.

DOMESTIC.

Treatment for Poisoning from very large doses of Opium, Belladonna, and their Alkaloids.

Editors Medical and Surgical Reporter:

I would respectfully submit the following cogitations to the judgment of wiser heads.

Say a very large portion of atropia has been taken into the stomach, and after a thorough evacuation of that organ we find narcotism steadily increasing, and doing so during a longer period than is required by the blood to pass over its entire route. The augmenting toxical symptoms are not alone due to the longer sustained impression on the nerve centres of the poison already in the blood,—indeed *its* power should even become diminished by diffusion, decomposition, and excretion,—but also to the absorption of fresh particles, which may have been retained in the bowel, or in the extravascular tissues of the stomach.

If we can, therefore, interfere with absorption until a physiological antidote has had time to act, and until the system can cast out the offending material, we may cherish a reasonable hope of saving an otherwise doomed life.

It is well known that vascular engorgement interferes materially with the process of absorption; that water, holding salines in solution, has been thrown into the veins in the collapse of cholera, not only without injury, but even with temporary benefit, that opium and belladonna are antidotal to each other.

Taking this into consideration, I propose to produce general congestion by the transfusion of blood-warm water into the veins, to as great an extent as can be safely borne, being guided by the tension of the radial and temporal arteries. While this would greatly obstruct absorption from the alimentary canal, it might not prevent it to so great a degree from the subcutaneous surfaces; and I would, therefore, use sufficient morphia, by the hypodermic method, to counteract atropia, (or *vice versa*), being guided as to quantity by its apparent effects. In case the antidote did not act by this channel, I should very carefully, and little by little, add minute portions of the drug to the liquid used for transfusion, until by the effects produced a proper dose could be arrived at.

It is a question in my mind whether healthy human blood would not answer a better purpose than the warm water; but this can only be de-

cided by experiment on the lower animals. If we used living, healthy blood, we might, with advantage, at the same time abstract a lesser quantity of the poisoned blood.

After these measures have been carried out, we should endeavor to rid the alimentary canal of any remaining poison, by purgatives and emetics, which do not depend upon absorption for their activity, as metallic mercury, and large clysters for purgation, and mustard for emesis; if the patient is unable to swallow, use an œsophageal tube. Also give olive-oil in pretty large quantity; this *may* prevent absorption to some extent, as is testified by experienced topers, who often fortify themselves for a competitive drinking bout, by taking a few spoonfuls of the oil before commencing to tipple.

The after treatment must be adapted to the symptoms. Should the loaded vessels not be relieved by diaphoresis, diuresis, etc., a drastic cathartic would probably accomplish the purpose; an apoplectic or inflammatory tendency might call for venesection. Rest in bed for a few days should be enjoined; and we may be called upon to use stimulants and tonics.

You may think from the foregoing, that a perusal of Prof. J. Aitken Meigs' inaugural address, on the "Correlation of the Physical and Vital Forces," has disposed me to treat the human organism like a mere machine; and I will admit that in those cases of disease, in which I have been able to apply an analogous mode of reasoning to that pursued by the mechanician when he seeks to remedy a defect in some complicated piece of machinery, the result of treatment based on such rationale has been vastly more satisfactory than in cases which were enveloped in the mystery of ignorance, and were treated empirically.

I hope that some one may be sufficiently interested in this matter, to test the main points of the treatment on the lower animals.

A. A. Hœhling, M. D.,
Surgeon U. S. Navy.

Philadelphia, Nov. 5th, 1868.

Plastic Surgery.

Editors Med. and Surg. Reporter:

Mrs. Bunker, aged 55 years, residence Lake Avenue, on April 10th, 1867, at 11½ o'clock, A. M., while cutting with a cooper's draw-knife shavings to kindle a fire, cut off the index finger so completely, that the part detached fell upon the floor. I saw her in about half an hour after the accident, and applied the detached portion, and retained the part in situ with the aid of adhesive plasters. The cut surfaces oozed blood for three days, at which time I dressed the wound, and the oozing ceased. I dressed the wound about once a week carefully; the parts healed, and united kindly; and even the nail retained its vitality, showing the great curative effects of nature, if we see fit to render assistance in the proper time.

L. McKay, M. D.

Rochester, N. Y., Nov. 15th, 1868.

Action of Chloroform.

Editors Med. and Surg. Reporter:

As chloroform is an intensely interesting topic to every physician, I very eagerly scan every article I find in anywise relating to it.

With such interest did I scan Dr. McElroy's article in the number for Oct. 24th. I am as much interested in the 'Philosophy of Force," as most persons who give it earnest thought; and I am firmly persuaded that Tyndall, Huxley, Spencer, and others, are now engaged in a work, having this philosophy as a basis, which will shed new light upon mental, as well as all other science.

Medicine surely will come in for a due share of the accruing good; and as Dr. McElroy has led off in such good style, we shall all be greatly indebted to him for *more light*. However, I hope the Doctor will allow of the suggestion, that it be as practical as possible. Chloroform, no doubt, *disturbs in some way the dynamics* of the nervous tissue, but this is merely stating the question, and is no solution.

Allow me to state a case that recently occurred in my practice, one attended with a valuable practical lesson.

I amputated at the junction of the upper and middle third the right arm of a boy four years old, in consequence of a severe injury to the limb. It required a good deal of chloroform to produce anæsthesia. After I had ligated the vessel, it was discovered that the little fellow was rapidly sinking. Several teaspoonfuls of whisky were given, as long as he could swallow, water thrown in his face, etc. By this time the pulse had become almost imperceptible, and the movements of the thorax had almost ceased. Just at this juncture I thought of elevating the table, and as soon as the body was brought to about an angle of forty-five, the respiration and pulse almost *immediately improved*. This was even readily observed by unprofessional persons present. I am indebted for the suggestion of this posture in such cases, to some recent writer in your journal, I forget the name.

Now, will Dr. McElroy tell me how this was brought about? Of course I know the additional flow of blood to the head caused the train of more remote vital processes which ended in recovery; but the brain was not empty, and in what way does the additional amount cause the effect produced? Does chloroform have any tendency to *decrease* the amount of blood in the brain, thereby causing the heart to fail in its functions, or does the drug directly act upon the heart?

Hoping that Dr. M. will bring his erudition in the "Philosophy of Force" to bear on this subject, I remain very respectfully,

J. C. Mobley, M. D.

Hernando, Miss., Nov. 5, 1868.

News and Miscellany.

Antoine Clot-Bey.

The following from the *Messager de Toulouse*, we copy from the *Medical Times and Gazette*.

"Clot was one of the most intelligent and, at the same time, one of the poorest practitioners of Marseilles. He lived as a Bohemian, ill-clothed and ill-fed, drawing teeth now and then for the sailors, dining a little better when the extraction of a few molars put a little in his purse. Mehemet Ali, having taken it into his head to import civilization into Africa, commissed General Libron to expedite workmen, surgeons, savants, merchants, etc., to Egypt, each workman to receive 150 francs besides a free passage. Dr. Clot presented himself with a seedy coat, holes in his boots, and a shapeless hat. 'General,' he said, 'I am a Doctor in Medicine—here is my diploma. I have plenty of courage, but no clothes. All I ask is to try my fortune.' The general selected him. When Mehemet Ali passed his French consignment under review, he found that there was not one of the newcomers able to exchange a couple of words with him. Still Mehemet understood Italian, and one of the emigrants only were found who could speak that language fluently. It was Dr. Clot. Conversation was rapidly set up, and Clot as rapidly became a favorite of the Viceroy. Six months afterwards a School of Medicine and Hospital were founded. Clot studied Arabic so effectually as to be able to speak the language and peruse the Medical writers. He delivered his lectures in that language, received a commission in the army, and became Bey at the same time as Colonel Selves became Pacha under the name of Soliman.

"Clot abdicated neither his nationality nor his religion, continuing all his life a Frenchman and a Catholic, and always employed all his influence for the protection of the Catholic missionaries. This point is to be insisted upon, as he has been accused of apostacy. He repaired, however, several times to Rome, where he was well received, thanked, and encouraged by the Pope. In fact, he lived and died a Christian. Many were the difficulties he had to overcome. Mussulman fanaticism interdicts all anatomical studies, and when he proposed dissections there was a general explosion. The ulemas, the muftis, and devotees of every description besieged the Viceroy and demanded of him the closure of the school. Dissecting bodies were indeed a profanation. Mehemet put them off, and bade Clot Bey commence his demonstrations. The Professor, forceps and scalpel in hand, opens the chest of a corpse, when one of the students, more fanatical or bolder than the others, rushed upon him and stabbed him with a poignard. The blade slid over the ribs, and Clot Bey, perceiving that he was not seriously hurt, took a piece of court plaster from his dressing-case, and applying it to the wound, observed to his class—'We were speaking of the disposition of the sternum and the ribs, and I now have to show you why a blow directed from above, had so little chance of penetrating the cavity of the thorax.' This proof of *sang froid* gave him an incontestable moral ascendancy over his pupils. He continued his lectures, and turned out some skilful practitioners. He was Officer of the Legion of Honor, and Commander or Grand Cross of almost every order of the world, having more than sixty decorations, although never wearing other than the red rosette, the cross of his own country. In one of my conversations with him, I asked him his matured opinion on the plague of the East, a disease which he had studied for a quarter of a century, and had so successfully combated. 'Is it contagious?' 'Certainly not. For eighteen years it has existed wherever I have been. I have passed entire days in visiting patients, changing their position with my own hands because no one else dare touch them. Well, after thus being in contact with hundreds of them, I have gone home and have found running to meet me my only daughter. She would throw her arms around my neck, and I pressed her to my heart, never for an instant believing that I exposed her to any danger. I entirely deny contagion.'"

Monopoly in Medical Advertising.

The *Medical Times and Gazette* says: "By an editorial note in the *New York Journal* we learn with great surprise that a journal which occupies so deservedly a high position, and enjoys so large a circulation as the *American Journal of Medical Science*, steadily refuses the insertion of any advertisement relating to books written by authors however eminent, if these are published by any other house, however respectable, than that of its own proprietor, Mr. LEA of Philadelphia. The writer observes:

"'All members of the profession are entitled to expect that each medical journal shall consent to advertise medical works written by proper men, and published by houses of respectability other than that responsible for the journal in qustion. The refusal of such advertisements, and their exclusion from a medical journal aiming to represent American Medical literature, must show a spirit at variance with that exalted purpose, which should give the tone to all Medical journals, and even impair confidence in the fairness of reviews of publications of rival houses.'

"Well, we certainly in this matter exhibit a more liberal spirit than our American cousins. Nowhere can the competition of medical and literary journals be more keen than it is in London, but certain it is that no publisher who might be proprietor of any of them would ever dream of depriving a rival of his legitimate publicity. With regard to the American journal in question the case is especially hard, as it is almost the only one that circulates everywhere, all over the Union and in Europe. For ourselves we have often felt the want of complete lists of new American books, similar to those with which we are so abundantly furnished of our own productions."

New York Medical Colleges.

The College of Physicians and Surgeons has abandoned the preliminary course, commencing its regular term a fortnight earlier, on the 1st of October. Some advantages might follow the adoption of this plan by all the schools, so that the first of October should come to be generally recognized as their regular opening day; but as yet the others hold the preliminary course in favor. The college building has been renovated, and greatly improved in the matter of ventilation and convenience.

At the Medical Department of the University, Prof. DARLING has initiated a movement for the encouragement of dissection among practitioners in the city, the ticket of Practical Anatomy being offered gratis to all graduates, in regular practice here, who have before pursued a course of dissection. The amount of clinical instruction given in this college has been increased; while its proximity to New York Hospitals gives the students ready access to the excellent clinics there held.

At Bellevue Hospital Medical College the resignation of their active duties by Profs. TAYLOR and WOOD has effected considerable changes in the obstetrical and surgical departments. In the former, Profs. ELLIOT and BARKER will now exchange subjects every year, each giving didactic lectures during one half of the term, and clinical instruction during the other half. This season Dr. BARKER takes Midwifery, and his colleague the Diseases of Women and Children. In the surgical department, Prof. HAMILTON resigns to Prof. VAN BUREN the Principles of Surgery, retaining Practice of Surgery, and taking from Prof. WOOD the chief part of Operative Surgery. Prof. VAN BUREN retains Diseases of the Genito-Urinary System, and their operative treatment. To Prof. MOTT's chair of Surgical Anatomy are now attached the Operations upon Arteries, Aneurism, and Hernia. Prof. SAYRE retains Orthopædic Surgery, and the operations pertaining to it.

The Woman's Medical College of the New York Infirmary starts with a progressive plan of instruction, embracing a three year's course, with annual examinations—a feature which our older colleges would do well to emulate. In the Faculty are some of our younger men who have already distinguished themselves in special fields of investigation, and the Board of Examiners includes some of the ablest professors in our other colleges. This school is fortunate in having secured for its departments of Chemistry and Materia Medica, the use of the rooms and apparatus of the School of Pharmacy.

All the schools will reap the benefits of the new Clinical Theatre, which is soon to be erected in connection with Bellevue Hospital. An excellent design is already accepted.—*Medical Record.*

Anecdote of Hyrtl.

Professor Hyrtl and a Student.—A short time since a student of medicine, whose zeal was greater than his purse, applied to the Professor for his ticket, but asked that payment might be deferred. His request was denied in spite of all protestations. The student departed in despair, but a comrade, who understood HYRTL better, gave him some advice upon which he acted the next morning. Approaching the Doctor he ex-

claimed, "Sir Aulic Counselor! I owe Professor Hyrtl for his course of lectures. I beg you will lend me the amount." The Professor indulged in a smile of satisfaction, drew forth his purse, and said: "Here, *amice*, are ten florins; pay your college fees." The student took the money, and answered with great decision: "I beg pardon, Sir Counselor, I owe 10 florins and 50 kreuzer (the third of a cent), Professor Hyrtl does not excuse a penny." "You are right," replied Hyrtl, "and he is also right; here are the 50 kreuzer. Remember me to the Professor." (*Ungar. Med. Presse*, 16 June, 1868.)

The Climate of Minnesota.

The following letter, by Dr. I. Farrar, dated St. Paul, Minnesota, Sept. 24, 1868, has appeared in several papers. The subject is an important one to the public, and we should be glad to have additional information on it, not in the way of assertion, but by careful statistics of hygrometrical and thermometrical observations.

"I am sorry to say there have been many fabulous accounts published in our eastern papers in regard to the climate of this new and enterprising State, viz., its 'non-piercing winds,' , mild winters,' 'dryness of atmosphere,' and that the resident of this clime was never annoyed with sudden changes of weather, etc.

As to the latter, allow me to say that a more changeable climate from one extreme to another, I have never experienced in this country. The changes are more sudden, too, than they are in the New England States, thus making this climate totally unadapted to patients suffering with bronchial or catarrhal complaints, though hundreds are annually sent here by their physicians and friends. It has been intensely cold, with heavy frost at night, for the past two weeks, and last evening we had our first snow storm.

The climate in Minnesota has its peculiarities; and in not a few instances the consumptive invalid will improve far beyond our expectation, providing he don't come too late, as thousands have and are still doing. I have seen no evidence of the dryness of the air here in the interior of the State. I have yet to learn of a single instance wherein a patient with bronchial or catarrhal disease has been in the least benefited by this climate. But, on the other hand, they are maladies continually originating in this State. Not a few such have consulted me in regard to their cases since my brief sojourn in St. Paul. I invariably send all such, (or rather advise them) to spend the winter in Aiken, South Carolina—unless such patients prefer to go to Cuba or California. A climate so changeable and subject to such severe currents of wind as this, should not be sought after by the invalid in the last stage of consumption. It is universally conceded that the climate here has materially changed within the past few years The mornings are very foggy, rains more frequent, the snow melts in midwinter, things unknown to many of the older residents in years past.

I have written just what I consider a true state of affairs, without prejudice; and should it prevent a single sufferer from leaving his home at the "eleventh hour," where he is surrounded with every comfort, for this cold and unadapted clime, I shall consider I have been well paid for the information rendered."

Surgery by Lightning.

The London *Lancet* says:

A boy of twelve, belonging to Korsk (Western Russia), who used to walk with a crutch, on account of anchylosis of the right knee, was on horseback in the fields, when he was overtaken by a violent storm. After a severe clap of thunder, the horse ran away, and the boy, completely stunned, fell to the ground. When his senses returned, and he tried to rise, he found that his right leg was gone. His uncle, who had ridden by his side, and his own horse had disappeared. The poor boy, at first somewhat collapsed, fell asleep. His companion, however, at last returned, after having secured the horse, and on examinining his nephew, he observed that the right leg was entirely wanting. The patient's shirt and clothes were in shreds, and burned along the seams, and on the body were many scars. The boy was conveyed to the village in a cart, suffering severely in the stump, and much alarmed at the hemorrhage, which, however, soon stopped. A few days afterward, Dr. Racowitch found a regular wound, as usually made by the amputating knife, surrounded with granulations, and presenting in the centre a few gargrenous spots. The division had been effected by lightning, through the superior extremity of the tibia, the patella and femur being intact. The healing of this wound was very rapid, and by the use of ordinary means. The severed leg was found on the grass several days after the accident, just where the boy had been thrown from his horse. It was quite dried up, and emitted no smell, the tibia being quite black, and stripped half down the leg. These facts are mentioned in the *Berl. Klin. Woch.*, No. 21, 1868, and guaranteed by Dr. Sycyanke.

A Modern Sampson.

In Dr. Alfred Booth's Reminiscences of Springfield, Mass., occurs the following account of Deacon Hitchcock: "Born in 1722, in the North Main street region, he removed while a young man into the east part of the town, now known as South Wilbraham, married in 1743, and was the first deacon of the church there, continuing in office many years. He is well remembered by the Hon. Oliver B Morris, as occupying the deacon's seat at meetings, his whitened locks giving him a venerable appearance. During a long life he was of wonderful strength, agility and endurance, and had he lived in the palmy days of Greece, he would have been a worthy competitor in the games of those days. It is related of him that on one occasion, a man riding by the field where he was at work and boasting of the speed of his horse, was challenged by the deacon, who said he could run to Springfield quicker on foot than the horse with his rider could. The test resulted in the triumph of the deacon, distance ten miles, time not stated. He would lift a cart-load of hay by getting his shoulders under the axle, in a stooping posture, and throw an empty cart over with one hand, by taking hold at the end of the axle-tree. When loading grain in a cart he would take a bag by the teeth, and with a swing and the aid of a push from the knee, throw it into the cart. He had double teeth in front, and would hold a ten-penny nail by them, and break it off with his fingers.* He used to say he did not know a man he could not whip or run away from. The day he was seventy years old, he remarked to his wife that when they were first married he was wont to amuse her by taking down his hat with his toes, and added, 'I wonder if I could do it now!' Thereupon he jumped from the floor, took off his hat with his toes, came down on his feet like a cat, hung up the hat on the nail, turned to the table, asked a blessing, and ate of the repast then ready."

Physicians' Mutual Aid Society.

The Physicians' Mutual Aid Society met on Saturday evening, November 14 in New York and completed its organization by the election of three additional directors and two secretaries.

The object of the association is simply to afford the heirs of its deceased members, by the immediate payment of one dollar from all those admitted under fifty years of age, and two dollars from those admitted over fifty years of age, when informed of the death of their associates. Any regular member of the medical profession of the counties of New York, Kings, Queens, Richmond, and Westchester, in good health, and actual practice, and under seventy years of age, may become a member.

—— The case on trial in Bangor recently, George Chase *vs.* Dr. Calvin Seavey for malpractice in setting plaintiff's leg, came to a sudden end, when the fact came out in the testimony, that during the absence of the defendant, the leg which the defendant was employed to set was taken out of the box. The counsel for the plaintiff deemed it for the best interest of their client to become nonsuit.

—— There are so many quacks in London who assume the title of M. D., that the publishers of the *London Directory* have determined to expunge in future editions of that work, from the list comprising the names of physicians and surgeons all those not registered under the Medical Act of 1858.

Last year Gopsill's *Philadelphia Directory* discriminated between regular and irregular practitioners of medicine. As we have no medical laws that are worth anything as a protection to the community, this is the best thing that can be done.

—— Dr. Paul Broca has been appointed Professor of Surgery in the Hospital Clinic of La Pitié, Paris. Dr. B. was already Professor of Surgical Pathology in the Prussian Medical Faculty, and was one of those accused of materialism recently in the French Senate.

—— A bill has passed the Vermont Legislature, giving the body of an executed criminal to any regular medical school. An unique argument in favor of its passage, was that the delivery of the body for dissection would add a new terror to the death penalty, and deter from the commission of crime!

Army and Navy News.

Navy News.

List of changes, &c., in the Medical Corps of the Navy, during the week ending Nov. 21, 1868.

Surgeons T. M. Gunnel, and J. C. Spear, to be detached from U. S. S. Franklin on the 1st proximo.

Passed Assistant Surgeon D. R. Bannan, detached from the Franklin, and waiting orders.

* This must have been a *wrought* nail, as the present mode of making nails had not then been introduced.—[Eds. Med. and Surg. Rep.]

Surgeon N. L. Bates, ordered to the U. S. S. Swatara.

Assistant Surgeon Alfred Griffith, detached from the Naval Academy and ordered to the Swatara.

Passed Assistant Surgeon Thomas Hiland, to be detached from the Swatara on the reporting of his relief.

Assistant Surgeon Wm. S. Willes, ordered to the Naval Academy, Annapolis, Md.

Passed Assistant Surgeon F. L. DuBois, ordered to the Naval Hospital, Chelsea, Mass.

Surgeon Charles Martin, ordered to temporary duty on board the Franklin, and to be transferred to the Ticonderoga on falling in with that vessel.

Passed Assistant Surgeon, H. P. Babcock, detached from the U. S. S. Michigan and ordered to duty on board the Franklin.

Assistant Surgeon George Otis Allen, detached from the Naval Hospital, Chelsea, and ordered to duty on board the Franklin.

Surgeon R. C. Dean, detached from the Naval Retiring Board, Philadelphia, and ordered to the Michigan.

Surgeon Thomas Dillard, ordered to duty on the Naval Retiring Board, Navy Yard, Phila.

Surgeon Joseph Beale, detached from the Naval Medical Board, Phila., and ordered to the Naval Rendezvous, Philadelphia.

Surgeon Charles Eversfield, ordered to duty as member of the Naval Medical Board, Navy Yard, Philadelphia.

Passed Assistant Surgeon F. M. Dearborne, detached from the Receiving Ship, at Boston, and ordered to the U. S. S. Wasp.

Assistant Surgeon Wm. V. Marmion, ordered to the Receiving Ship Ohio, Boston Mass.

[*Notices inserted in this column gratis, and are solicited from all parts of the country; Obituary Notices and Resolutions of Societies at ten cents per line, ten words to the line.*]

MARRIED.

Carr—Clark.—At the Thirty-fourth Street Reformed Church in New York, on Thursday, Nov. 19, by the Rev. Isaac Riley, John F. Carr, of San Francisco, Cal., and Annie Clark, daughter of Peter F. Clark, M. D., of that city.

Fahnestock—Fahnestock.—Nov. 19, by Rev. J. Isadore Mombert, D. D., Dr. H. A. Fahnestock, of Annville, Pa., and Emma Ellmaker, daughter of Geo. Fahnestock, Esq., of Lancaster.

Fulsom—Johnson.—In Saco, Me., Nov. 12, by Rev. Benj. Wheeler, Dr. A. P. Fulsom, and Julia M. Johnson.

Judson—Haughwout.—At the Madison Square Presbyterian Church New York, Nov. 19th, by the Rev. Geo. D. Boardman, of Philadelphia, assisted by the Rev. Wm. Adams, D. D., Adoniram B. Judson, M. D., and Anna M., daughter of the late Peter N. Haughwout, of Port Richmond, Staten Island.

Kinsman—Orr.—Nov. 4th, at the parsonage in Mt. Pleasant, Iowa, by Rev. J. C. McClintock, Mr. H. A. Kinsman, of Keokuk, Iowa, and Clara, daughter of Dr. W. L. Orr, of Ottumwa.

Orth—Jennings.—At Lafayette, Ind., on Nov. 12, Dr. Wm. M. Orth and Miss Gertrude, daughter of the late Dr. Jennings.

DIED.

Cockcroft.—In New York, Nov. 22, Emma Louisa, wife of Wm. Cockcroft, M. D., and youngest daughter of the late Abraham Fardon.

Tevis.—Nov. 5th, in Milton township, Jefferson co., Ind., Dr. Benj. Tevis, aged 62 years.

ANSWERS TO CORRESPONDENTS.

Dr. Z. E. B., of Mich.—Only one number of Brown Sequard on Functional Diseases of the Nervous System has been published.

Dr. J. D. C., of N. Y.—The best practical work on the Microscope with which we are acquainted is Beale's. Price $7.00.

Dr. R. D. M., of O.—The medical botanies you mention are the best; no recent work on this branch with colored plates, has appeared.

Dr E. N. S., of Pa.—"What do you think of Dr. Ander's Iodine Water?" It is a humbug.

"Is there any medical board sitting now to examine candidates for the position of Assistant Surgeon in the U. S. Army?" There is not.

Dr. E N. H., of Ky.—"I have a case of ulceration of the uterus, which is very hard to cure. I have applied the nitrate of silver and tr. iodine to the uterus, and used injections of chlorate of potassa with but little benefit. My patient has small ulcers around the mouth of the uterus, and often, in making an examination with the speculum, it is almost impossible to see the mouth of the uterus, as it is turned toward the rectum so far that it cannot be brought to view. She has had a bad feeling on top of her head, pain in the region of the ovaries, also an incessant backache, and also has leucorrhea slightly. Now will you give me the very best treatment of the case through the columns of the Reporter? I am very anxious to cure this case, as others that have tried have been unsuccessful. To look at this patient, you would not think that she was suffering from any disease, with the exception that her skin has a dingy color, which I believe is very common in uterine diseases. What do you think of helonin and *senecin*, so much praised praised by the Eclectic school as great uterine tonics?"

We have no faith in helonin or senecin. Try sulphate of zinc locally, and ferrugineous tonics with cinchona internally, *attending to digestion*, and see if there is not anteversion in the case. If so, reduce it. See also if there is any tenderness in the lower portion of the spine; if so, that will be an indication for treatment.

Contraction of Plantar Muscles.

Messrs. Editors.—Your correspondent, Dr. C. F. B, of New Jersey, seeks your advice in a case of clonic contraction of the plantar muscles. (Reporter of Nov, 7th.) I recently had a somewhat similar case in my practice, in which (as you suggest) I resorted to hypodermic injections of morphia (gr. 1 5). *One* operation brought decided relief to my patient and I have not been obliged to repeat it, as there has been no return of the difficulty. The patient was a female, aged 35, of nervo-sanguine temperament. The trouble had only been of short standing, but had apparently been aggravated by an exposure to cold.

Geo. A. Sterling, M. D.

Sag Harbor, Long Island.

METEOROLOGY.

November,	9,	10,	11,	12,	13,	14,	15.
Wind	S. W.	S. W.	N. W.	N. W.	S. W.	W.	N. E.
Weather	Clear.	Clear Hazy.	Cl'dy. Rain.	Clear.	Clear	Clear.	Clear.
Depth Rain			6-10				
Thermometer.							
Minimum	52°	51°	4[illegible]°	29°	28°	33°	40°
At 8, A. M.	58	58	49	36	38	44	44
At 12, M.	67	70	49	44	50	54	50
At 3, P. M.	66	69	47	43	51	53	53
Mean	60.75	62.	47.	38.	41.75	46.	46.75
Barometer.							
At 12, M.	29.9	29.8	29.8	30.2	30.2	30.1	30.1

Germantown, Pa. B. J. Leedom.